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Purpose and Procedure

SURVEY OF FOREST EMPLOYMENT POSSIBILITIES IN THE ANTHRACITE REGION OF PENNSYLVANIA

ALLEGHENY FOREST EXPERIMENT STATION

ECONOMIC SURVEY
ANTHRACITE FOREST REGION

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

ALLEGHENY FOREST EXPERIMENT STATION
In cooperation with the University of Pennsylvania
3437 Woodland Avenue, Philadelphia, Pa.

Hardy L. Shirley, Director

This paper was prepared by

DIVISION OF FOREST ECONOMICS

R. D. Forbes, Senior Forester

ECONOMIC SURVEY, ANTHRACITE FOREST REGION
Kingston Branch Postoffice, Wilkes-Barre, Pa.

Clement Mesavage, Assistant Forester

Purpose and Procedure
SURVEY OF FOREST EMPLOYMENT POSSIBILITIES
IN THE ANTHRACITE REGION OF PENNSYLVANIA

By the Allegheny Forest Experiment Station

The anthracite region of Pennsylvania is faced with one of the most disturbing social and economic situations in the entire United States. A majority of the 1,500,000 inhabitants of the 12 counties* containing or surrounding the coal deposits are basically dependent on a single industry - the mining of anthracite. Production and consumption of this coal in 1917 was nearly 100,000,000 tons; it began to decline in the 1920's, and is now about 50,000,000 tons. As a result of this huge drop in production, 50,000 miners alone are unemployed. Because of technological advances in mining methods, and other factors, the great majority of these men appear to be permanently out of mining jobs. In 1936 expenditures for direct and work relief in the four principal coal-producing counties totalled nearly $40,000,000. Today 133,000 people in these counties, or 11.9 percent of the total population, receive direct relief. This is more than twice the percentage in the remainder of Pennsylvania. In 1936-37 some 45,000 persons were wholly dependent for their support on an illegal industry - the so-called bootlegging of anthracite coal.

Many plans have been proposed for alleviating and curing the economic and social ills of the anthracite region. For decades, and in part of the region for centuries, coal will unquestionably remain its economic foundation. But other natural resources can be developed, particularly

* Carbon, Columbia, Dauphin, Lackawanna, Lebanon, Luzerne, Montour, Northumberland, Schuylkill, Susquehanna, Wayne, and Wyoming.

the replaceable ones. Among these, the forests of the region have great promise. There are about 2,000,000 acres of forest land. Fires and repeated cutting have reduced one-eighth of this area to grey birch, scrub oak, or low shrubs. The remainder is in second-growth forest, for the most part inferior, open stands. Such as these forests are, they lie at the back door of populous communities. Lackawanna County, with 688 inhabitants to the square mile, has 57 percent of its land area in forest. Luzerne County has 498 inhabitants per mile, and 62 percent of the land in forest.

Idle men and idle land are found side-by-side in the anthracite region. Common sense dictates an examination of the possibility of alleviating present unemployment by applying labor to rebuild the forest, thereby assuring greater future employment based on permanent forest industries. In the present emergency, wages for most of such labor must come from public sources, and the public should assume a greater share of ownership in forest land. Nevertheless, the gradual upbuilding of private forest enterprise on a large scale is confidently expected.

PREVIOUS STUDIES

On February 25, 1939, the Anthracite Region Rehabilitation Committee presented a report to the Allegheny Section of the Society of American Foresters, which described forest and economic conditions in the anthracite coal region of Pennsylvania. It pointed out that rehabilitation of forests afforded a useful field for unemployment projects, and that restored forests, conservatively managed, would produce perpetually raw material for permanent local industries. So far as we know, no earlier analysis had ever been made of the opportunities for forest

employment in the anthracite region. However, the Anthracite Coal Industry Commission of Pennsylvania, in its "Report and Final Recommendation" of March 31, 1938, mentioned the possibility of applying forestry measures to the surplus coal lands which it had recommended that the State acquire. It said: "This large area could be reforested by the State, and the timber resources thus created would in later years yield a profitable output. The area itself could, in addition, be converted into fishing and hunting reserves and expansive recreation parks for the people of Pennsylvania". In June, 1939, the Wyoming Valley Chamber of Commerce began a series of mimeographed "reports of investigations" on forestry in the anthracite region. These and earlier Chamber activities have gone far toward arousing Federal interest.

PURPOSE OF THE SURVEY

The Agricultural Appropriation Act for the fiscal year 1940 earmarked $18,000 of forest economic research funds for a survey of forest employment possibilities in the anthracite coal region of Pennsylvania.

The immediate objective of the survey is to determine how many of the unemployed of the anthracite region may be put to work now to upbuild the present badly depleted forest resources. Such upbuilding involves, among other jobs, a greatly intensified program of protecting the forest against fire, insects, and disease; planting of otherwise idle areas and subsequent care of the plantations; stabilization, by planting, of mine refuse banks and strippings; improvement of existing forest stands through selective cutting and application of good forest practice on lands now stocked; restoration of wildlife; development of recreational areas; control of erosion, and regulation of run-off of precipitation, particularly as it affects the mine-water problem.

The long-term objective of the survey is to determine how much labor, and of what kind, may be effectively and economically employed in permanent forest industries, once the forest resources have been restored. By forest industries is meant not only mine prop and timber production, sawmills and wood-using plants of all kinds, but also forest recreation, including hunting and fishing, and watershed management for water supply, flood control, and related purposes.

PROCEDURE

The present forest economy and employment of the region will be studied in detail. A future forest economy, based on continuous, efficient use of all forest land, will then be recommended, and estimates will be made of the number and character of jobs which it will create. Methods of putting into effect the recommended economy, the costs involved, and the benefits to be expected, will be described.

PRESENT FOREST ECONOMY AND EMPLOYMENT

By taking every advantage of existing information, and by soliciting the cooperation of public and private agencies concerned with the problem, including WPA and other emergency organizations, it is felt that the following subjects can be covered:

1. Present forest areas; abandoned farm areas and industrial waste lands available for forest use.

2. Forest types; condition of forests and lands; forest uses, such as parks, game lands, farm woodlands, and watershed forests.

3. Forest inventory. (a) Present wood volume in board feet, cubic feet, tons, or other suitable units. (b) Current increase (growth) in wood volume. (c) Current forest depletion by cutting, fire, and other agencies. (d) Probable net change in wood volume during next 10 years.

4. Forest land ownership; tax delinquency of private land.

5. Present employment in forest industries; present wood consumption, direct and by remanufacture.

6. Size and distribution of local and adjacent populations; unemployment and unemployment trends, all industries; transportation facilities, as affecting forest protection and use.

RECOMMENDED FOREST ECONOMY AND EMPLOYMENT

A thorough analysis of the above data should make possible definite recommendations for rebuilding of the region's forests, and for permanent management of the restored resource. Estimates will be made of the emergency or other employment justifiable on the first job and the number of permanent jobs which might be supported by the forests of the region under continuous, sustained-yield management. Consideration will be given to the following subjects, among others:

(1) Intensified protection against fire and other destructive agencies. Region-wide compilation of existing plans. A detailed plan of physical improvements for intensive protection of a sample area against fires (to be prepared for early publication).

(2) Stable forest ownership. Description, and mapping at least in broad zones, of forest lands which the public should acquire to prevent further deterioration of the forest, or to develop for special public purposes. Use of tax-delinquent lands for community forests, parks, game lands, etc.

(3) Forest land use classification. Description, and if possible mapping, of areas needed for intensive recreation or beautification and for intensive watershed protection, as distinct from wood-producing areas or those adaptable to a combination of major uses.

(4) Silvicultural and wildlife management. A generalized description of known methods of seeding and planting, timber stand improvement, improved harvesting of the forest crop, and other silvicultural measures, including protection and management of wildlife, by major forest types, and by uses given under (3).

(5) Regional regulation of timber cut, basic to sustained yield management. To insure a continuous supply of timber needed by the coal industry, and to provide the basis for permanent wood-using and manufacturing industries. Administrative machinery to be suggested.

Furtherance of Recommendations

Forest employment in the anthracite coal region will not be increased by paper plans alone. Every effort, consistent with the principal job of fact-finding, will be made by the Survey to present its recommendations in a form that action agencies can immediately carry out. When action is jeopardized by legal, financial, or other practical obstacles, detailed plans for sample areas or projects will be drawn up for the use of action agencies, as test cases. Cooperation of all State Departments and local governmental units concerned will be sought and maintained in every phase, and at every stage, of the work. Similar cooperation with semi-public agencies, such as Chambers of Commerce, service clubs, labor unions, conservation and sportsmen's organizations, will be earnestly cultivated. By personal contact, and by publication of the plans and current results of the work in popular form, the general public and the forest landowners will be kept in touch with the Survey.

Costs and Anticipated Benefits of Recommended Measures

The cost both to the public and to private enterprise will be estimated for all of the recommended measures. The extent to which the immediate program of forest restoration may be financed from available emergency funds - such as DPA, WPA, NYA, and CCC - will be investigated. Among the anticipated benefits resulting from restoration of the anthracite region's forests and establishment of a permanent forest economy, the following will be discussed:

(1) Permanent forest industries. Stable and continuous employment, on a substantially increased scale; a broadened tax base; long-term capital investments supported by a renewable resource.

(2) A dependable local supply of forest products. For anthracite coal mines, railroads, and other industries.

(3) Public health. A greener and more attractive environment; improved water supply; and increased facilities for outdoor recreation, including hunting and fishing, both for those living within the region and those in the much larger and more congested area accessible to it.

(4) Control of erosion, floods, and mine water. Fixation of mine refuse banks and strippings; slower run-off of rain and melted snow into local streams and mines.

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July 1940

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